

IN THE CLAIMS:

Claim 44 has been amended herein. Please note that all claims currently pending and under consideration in the referenced application are shown below. Please enter these claims as amended. This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1-10 (canceled)

Claim 11 (withdrawn): A method for selecting modulators of the protein complex of Claim 40, said method comprising:

contacting said first protein with said second protein in the presence of a test compound; and

detecting the interaction between said first protein and said second protein.

Claim 12 (withdrawn): The method of Claim 11, wherein at least one of said first and second proteins is a fusion protein having a detectable tag.

Claim 13 (withdrawn): The method of Claim 11, wherein said contacting step is conducted in a substantially cell free environment.

Claim 14 (withdrawn): The method of Claim 11, wherein said first protein and said second protein are contacted with each other in a host cell.

Claim 15 (withdrawn): The method of Claim 14, wherein said host cell is a yeast cell.

Claim 16 (withdrawn): The method of Claim 11, wherein said determining step comprises measuring the amount of the protein complex formed by said first and second proteins.

Claim 17 (withdrawn): The method of Claim 11, further comprising a step of generating a data set defining one or more selected test compounds, said data set being embodied in a transmittable form.

Claim 18 and 19 (canceled)

Claim 20 (withdrawn): A method for selecting modulators of an interaction between a first polypeptide and a second polypeptide in a protein complex, said first polypeptide being survivin or a homologue or fragment thereof and said second polypeptide being a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT or a homologue or fragment thereof, said method comprising:

providing in a host cell a first fusion protein having said first polypeptide, and a second fusion protein having said second polypeptide, wherein a DNA binding domain is fused to one of said first and second polypeptides while a transcription-activating domain is fused to the other of said first and second polypeptides;

providing in said host cell a reporter gene, wherein the transcription of the reporter gene is controlled by the interaction between the first polypeptide and the second polypeptide;

allowing said first and second fusion proteins to interact with each other within said host cell in the presence of a test compound; and

determining the expression of said reporter gene.

Claim 21 (withdrawn): The method of Claim 20, wherein said host cell is a yeast cell.

Claim 22 (withdrawn): A method for selecting compounds capable of interfering with the interaction between a first protein and a second protein in a protein complex, wherein

(a) said first protein is selected from the group consisting of

(i) survivin,

(ii) a survivin homologue having an amino acid sequence at least 90% identical to that of survivin and capable of interacting with a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT,

(iii) a survivin fragment capable of interacting with a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT, and

(iv) a fusion protein containing survivin, said survivin homologue or said survivin fragment; and

(b) said second protein is selected from the group consisting of

(1) HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT,

(2) a homologue of a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT having an amino acid sequence at least 90% identical to that of said protein and capable of interacting with survivin,

(3) a fragment of a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT capable of interacting with survivin, and

(4) a fusion protein containing a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT, said protein homologue or said protein fragment, said method comprising:

contacting said first protein with said second protein in the presence of a test compound and detecting the interaction between said first protein and said second protein; and

contacting said first protein with said second protein in the absence of said test compound and detecting the interaction between said first protein and said second protein.

Claim 23 (withdrawn): The method of Claim 22, wherein said contacting steps are conducted in a substantially cell free environment.

Claim 24 (withdrawn): The method of Claim 22, wherein said contacting steps are conducted in a host cell.

Claim 25 (withdrawn): The method of Claim 22, wherein the first protein is a fusion protein containing survivin or said survivin fragment, and said second protein is a fusion protein containing a protein selected from the group consisting of HDLC1, beta-actin, DNA helicase II, COPP, OSTP, SLC8A1, A2-CAT or said protein fragment.

Claim 26 (withdrawn): The method of Claim 22, further comprising a step of generating a data set defining one or more selected test compounds, said data set being embodied in a transmittable form.

Claims 27-39 (canceled)

Claim 40 (previously presented): An isolated protein complex comprising a first protein interacting with a second protein, wherein said first protein is selected from the group consisting of:

- (a) survivin, or a fragment thereof that interacts with HDLC1;
- (b) a first polypeptide having an amino acid sequence at least 80% identical to that of (a), and that interacts with HDLC1; and
- (c) a first fusion protein comprising (a) or (b); and

wherein said second protein is selected from the group consisting of:

- (i) HDLC1, or a fragment thereof that interacts with survivin;
- (ii) a second polypeptide having an amino acid sequence at least 80% identical to that of (i), and that interacts with survivin; and
- (iii) a second fusion protein comprising (i) or (ii).

Claim 41 (previously presented): The isolated protein complex of Claim 40, wherein said first protein is survivin.

Claim 42 (previously presented): The isolated protein complex of Claim 40, wherein said first protein is said first fusion protein.

Claim 43 (previously presented): The isolated protein complex of Claim 40, wherein said fragment of survivin comprises amino acid residues 89 to 142, 3 to 99, 47 to 142, or 47 to 99 of survivin.

Claim 44 (currently amended): The isolated protein complex of ~~claim~~ Claim 40, wherein said first protein is covalently linked to said second protein.

Claim 45 (previously presented): An isolated protein complex comprising a first protein interacting with a second protein, wherein said first protein is a first fusion protein comprising a first detectable tag and

- (a) survivin;
- (b) a survivin fragment containing a contiguous span of 10 amino acid residues of survivin, and that interacts with HDLC1; or
- (c) a first polypeptide having an amino acid sequence at least 90% identical to that of (a), and that interacts with HDLC1; and

wherein

said second protein is a second fusion protein comprising a second detectable tag and

- (i) HDLC1;
- (ii) an HDLC1 fragment comprising a contiguous span of 10 amino acid residues of HDLC1, and that interacts with survivin; or
- (iii) a second polypeptide having an amino acid sequence at least 90% identical to that of (i), and that interacts with survivin.

Claim 46 (previously presented): The protein complex of Claim 45, wherein said first protein is said first fusion protein comprising said first detectable tag and survivin; and said second protein is said second fusion protein comprising said second detectable tag and HDLC1.

Claim 47 (previously presented): The isolated protein complex of Claim 40, wherein said second protein is HDLC1.

Claim 48 (previously presented): The isolated protein complex of Claim 40, wherein said second protein is said second fusion protein.

Claim 49 (previously presented): The isolated protein complex of Claim 40, wherein said first protein comprises an amino acid sequence that is at least 80% identical to that of amino acid residues 89-142, 3-99, 47-142 or 47-99 of survivin.

Claim 50 (previously presented): The isolated protein complex of Claim 40, wherein said first protein comprises an amino acid sequence that is at least 90% identical to that of amino acid residues 89-142, 3-99, 47-142 or 47-99 of survivin.